



Electronic Time Relays

DZTR 32 L, DZTR 42 L for single voltage

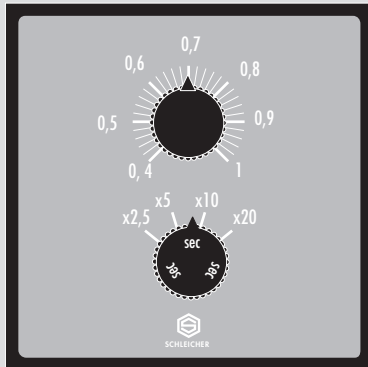
Function: ON-delay (AV) for burning control system with TÜV Test Certificate

1 setting range, divided into 4 time ranges

Contact equipment: DZTR 32 L = 1 changeover for safety time and 1 changeover
DZTR 42 L = 1 changeover for safety time and 1 changeover

DZTR 32 L, ...

72 x 72



Function

The setting of the time ranges is done on the timer's front by means of the lower rotary knob. Infinitely variable time setting within a range is carried out with the aid of the upper rotary knob.

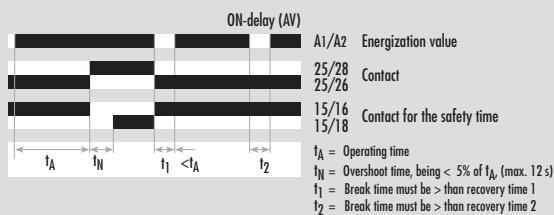
Upon application of the control signal and after the preselected ON-delay time has elapsed, the contacts switch into their operating position. In case of de-energization, the contacts go back into their off position.

The electronic time relays contain two different time circuits. Each of them has a relay that is switched according to the VDE 0435 norm. The contact used for the safety time with the terminals 15/16/18 results from the internal serial connection of the switched contacts belonging to both relays. It is granted that in case of interruption of one of both time circuits, there is no parallel operation of both relays and that terminals 16 or 18 will not be triggered. Therefore, it is assured that in case of failure of the time relay, the preset time delay is still extended. This condition complies with the requirements of the TÜV according to the Vd TÜV Direction Sheet No.452. The contact 25/26/28 cannot be used for the safety time circuit. Upon energization it switches with up to 5% of the operating time, however, with the limit of maximum 12 s before the other contact 15/16/18 (which is defined for the safety time).

Function Diagram

FD 0061

DZTR 32 L, ...



Product Description

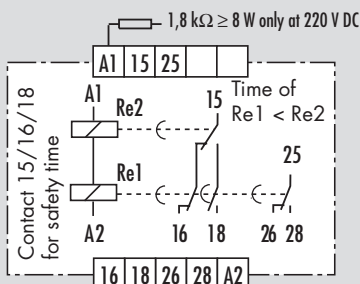
The electronic time relays DZTR ... are available with one setting range, divided into 4 time ranges.

Setting Range	Time Range
1 s to 20 s divided into :	1 to 2,5 s
	2 to 5 s
	4 to 10 s
	8 to 20 s
or 3 s to 60 s divided into :	3 to 7,5 s
	6 to 15 s
	12 to 30 s
	24 to 60 s
or 30 s to 600 s divided into :	30 to 75 s
	60 to 150 s
	120 to 300 s
	240 to 600 s

Connection Diagram

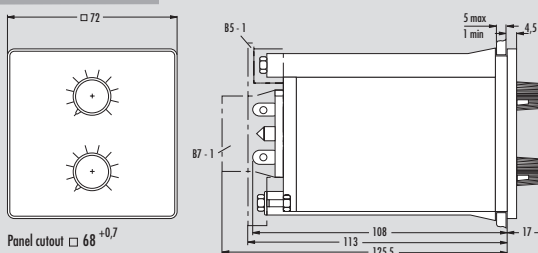
KS 0161/2

DZTR 32 L, ...



Dimensions

D 1-16



Type	Standard Voltage	Price Code
DZTR 32 L 20 s	230 V AC 50 to 60 Hz	D 3/25.1
DZTR 32 L 60 s	230 V AC 50 to 60 Hz	D 3/25.2
DZTR 32 L 600 s	230 V AC 50 to 60 Hz	D 3/25.3
DZTR 42 L 20 s	24 V DC 48 V DC 60 V DC 110 V DC 220 V DC	D 3/25.4
DZTR 42 L 60 s	24 V DC 48 V DC 60 V DC 110 V DC 220 V DC	D 3/25.5
DZTR 42 L 600 s	24 V DC 48 V DC 60 V DC 110 V DC 220 V DC	D 3/25.6



TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 1 10:04.89

Point 3.12

Function diagram

POWER SUPPLY

Rated voltage U_N	V DC
Rated voltage U_N	V AC
Rated consumption at 50 Hz and U_N (AC)	VA
Rated consumption at 50 Hz and U_N (AC)	W
Rated consumption DC	W
Rated frequency	Hz
Operating voltage range	

TIME CIRCUIT

Time setting/Number of time ranges
3 setting ranges available

Recovery time 1/2	ms
Minimum switch-ON time	ms
Release value	% U_N
Permissible parallel load	
Internal rectifier	
Average of the error	
Dispersion	% ± 10 ms
Influence of the energizing value, supply voltage	%/% ΔU_N
Influence of the ambient temperature	%/K

OUTPUT CIRCUIT

Contact equipment	
Contact material	
Switching voltage U_n	V AC/DC
Maximum continuous current I_n	A
Application category according to EN 60947-5-1:1991	
Permissible switching frequency	switching cycles/h
Mechanical service life	switching cycles
Response time	ms
Release time	ms

GENERAL DATA

Creepage and clearance distances between circuits acc. to DIN VDE 0110-1:04.97: Rated surge voltage	kV
Over voltage category	
Contamination level	
Design voltage	V AC
Test voltage U_{eff} 50 Hz acc. to DIN VDE 0110-1, Table A.1	kV
Protection class: Housing front panel/housing rear panel/flat pin terminal	
Radiated noise	
Noise immunity	
Ambient temperature, working range	°C
Dimensions	
Connection diagram	
Weight	kg
Accessories	

Approvals

GENERAL TECHNICAL SPECIFICATIONS

DZTR 32 L

Multi-range time relay for single voltage
ON-delay time relay acc. to VdTÜV-Direction Sheet No. 452 for safety time
FD 0061

230

16
2,0
50 to 60
0,8 to 1,1 x U_N

analog/4

1. setting range 1 to 20 s divided into: 1 to 2,5; 2 to 5; 4 to 10; 8 to 20	s
2. setting range 3 to 60 s divided into: 3 to 7,5; 6 to 15; 12 to 30; 24 to 60	s
3. setting range 30 to 600 s divided into: 30 to 75; 60 to 150; 120 to 300; 240 to 600	s
ca. 350/ca. 350	ms
-	ms
-	% U_N
yes	
no	
-	
$\leq \pm 1$	% ± 10 ms
$\leq 0,1$	%/% ΔU_N
$\leq 0,2$	%/K

1 changeover for safety time and 1 timed changeover

Ag Cu
250/300
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
6000
30 x 10 ⁶
-
-

2

III
3 outside, 2 inside
250
2,21
IP 50/IP 20/IP 00
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60

D 1-16
KS 0161/2
0,45
cover DA 1, lockable cover V 4, seal Z 1, socket connector B 5, pin holder B 7, page i.4

page i.5

DZTR 42 L

Multi-range time relay for single voltage
ON-delay time relay acc. to VdTÜV-Direction Sheet No. 452 for safety time
FD 0061

24 48 60 110 220

2,0	2,0	2,0	3,3	6,6*
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*with ext.series-resistance 1,8 k Ω \geq 8W

0,8 to 1,1 x U_N

analog/4

1. setting range 1 to 20 s divided into: 1 to 2,5; 2 to 5; 4 to 10; 8 to 20	s
2. setting range 3 to 60 s divided into: 3 to 7,5; 6 to 15; 12 to 30; 24 to 60	s
3. setting range 30 to 600 s divided into: 30 to 75; 60 to 150; 120 to 300; 240 to 600	s
ca. 350/ca. 350	ms
-	ms
-	% U_N
yes	
no	
-	
$\leq \pm 1$	% ± 10 ms
$\leq 0,1$	%/% ΔU_N
$\leq 0,2$	%/K

1 changeover for safety time and 1 timed changeover

Ag Cu
250/300
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
6000
30 x 10 ⁶
-
-

2

III
3 outside, 2 inside
250
2,21
IP 50/IP 20/IP 00
EN 50081-1:03.93, -2:03.94
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-20 to + 60

D 1-16
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